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09/742,696	12/19/2000	Robert Callaghan	00 P 7532 US 01	9143

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Siemens Corporation
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EXAMINER

PATEL, HARESH N

ART UNIT

PAPER NUMBER

2154

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/742,696

Applicant(s)

CALLAGHAN ET AL.

Examiner

Haresh Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☒ Claim(s) 1-11, 13-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-16 are presented for examination.

Response to Arguments

2. Applicant's arguments filed 3/14/2005 have been fully considered but they are not persuasive. Therefore, rejection of claims 1-16 is maintained.

Applicant argues (1) “combined teachings of the cited references, do not disclose claimed present invention, i.e., a telecommunications system including a telephony Internet server, a dispatcher is provided for delivering messages between dispatcher clients, i.e., software subsystems in the same process, a different process, or on a different machine, that need updates, etc. The dispatcher manages a pool of threads to balance the workload. The dispatcher can process both synchronous and asynchronous messages by dispatching the message to all registered subsystems in order of their registered priority. Subsystems register for receiving predetermined messages. The dispatcher maintains a database of their destinations. The dispatcher itself needs to have no knowledge of the contents of messages that are to be sent; and, the sender software subsystems need have no knowledge of the corresponding destinations”.

The examiner disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies “a telecommunications system including a telephony Internet server, a dispatcher is provided for delivering messages between dispatcher clients, i.e., software subsystems in the same process, a different process, or on a different machine, that need updates, etc. The dispatcher manages a pool of threads to balance the workload. The dispatcher can process both synchronous and

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asynchronous messages by dispatching the message to all registered subsystems in order of their registered priority. Subsystems register for receiving predetermined messages. The dispatcher maintains a database of their destinations. The dispatcher itself needs to have no knowledge of the contents of messages that are to be sent; and, the sender software subsystems need have no knowledge of the corresponding destinations” is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). What is claimed is, “the dispatcher configured to dynamically add software system application features associated with and balance system workload between the private branch exchange and the packet network”, and “adding software features to software subsystems”. The claimed limitations is newly presented over the previous rejection, dated 11/10/2004, which is addressed by the new ground(s) of rejection (please refer to the below rejections of this office action). Therefore the rejection is maintained as disclosed above.

Claim Objections

3. Claim 1-11, 13-16 is objected to because of the following informalities:

Claim 1 mentions, “telephony Internet server”, “to identify to said software dispatcher”, which should be, “telephony internet server”, “to identify said software dispatcher”, respectively.

Claims 2-6 mentions, “A system in accordance with”, which should be “The system in accordance with”.

Claims 5 and 11 mention, “field can comprise”, which should be “field comprise”.

Claims 6 and 7 mention, “said list”, which should be “said list of message receivers”.

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Claims 8-11 mentions, “A method in accordance with”, which should be “The method in accordance with”.

Claims 13-15 mentions, “A telecommunications system in accordance with”, which should be “The telecommunications system in accordance with”.

Claim 16 mentions, “to identify to said software dispatcher”, which should be, “to identify said software dispatcher”.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 1, 4, 10, 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 16 recite the limitations, “said message receivers”. There is insufficient antecedent basis for this limitation in the claim. Since, multiple message receivers exist (a list of messages receivers, a plurality of messages receivers) in the claim it is not clear which message receivers is referred by theses limitations.

Claim 4 recites the limitations, “said messages”. There is insufficient antecedent basis for this limitation in the claim. Since, multiple messages exist (particular messages, send messages) in the claim it is not clear which messages is referred by theses limitations.

Claim 10 recites the limitations, “said dispatching messages”. There is insufficient antecedent basis for this limitation in the claim. Since, multiple dispatching messages exist (dispatching messages in order of priority, dispatching messages to said message receivers) in the claim it is not clear which dispatching messages is referred by theses limitations.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 6, 7 and 12-16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gudjonsson et. al. 6,564, 261 (Hereinafter Gudjonsson) in view of Draginich et. al. 6,560,329 (Hereafter Draginich) and Coulouris et. al. Distributed Systems Concepts and Design, Second edition, 1994, pages 34-38 (Hereinafter Coulouris) and Sanders et al., 6,574,605 (Hereinafter Sanders).

7. As per claims 1, 6, 7 and 12-16, Gudjonsson teaches a system, a method (e.g., figure 13, col., 17, line 48 – col., 18, line 13) comprising,

dispatcher adapted to receive and dispatch one or more messages for adding software features (e.g., additional features supported by load balancing service, device handlers, routing service, contact list service, figure 13), to one or more software subsystems (i.e., routing service receiving user requests and dispatching to the registered device handlers to handle the requests, figure 13, col., 17, line 48 – col., 18, line 13),

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a software dispatcher (i.e., routing service, figure 13) in a telephony internet server (e.g., figure 13, col., 17, line 48 – col., 18, line 13), the software dispatcher configured to add software system application features (e.g., features supported by load balancing service, device handlers, routing service, contact list service, figure 13), associated with a private branch exchange and a packet network (e.g., features supported over the network, figure 13, col., 17, line 48 – col., 18, line 13), and adapted to maintain a list of message receivers (e.g., contact list, registered device handlers and users, load balancing service, figure 13, col., 17, line 48 – col., 18, line), said list comprising a list of integers, subsystem provide a dispatcher with an identification of a message to be delivered (e.g., User ID, figure 18(a)) identifying which receivers are to receive particular messages, dispatcher identifies a destination (e.g., identifying of the users to receive the messages through the device handlers, col., 17, line 48 – col., 18, line 13),

the dispatcher identifying and distributing the messages by unique integer and node (e.g., user identification and mapping, unique per CID, figure 12(b), database (13) containing device handler identification related to a user node for load balancing, figure 13, col., 17, line 48 – col., 18, line 13),

a plurality of message receivers (e.g., users through device handlers, col., 17, line 48 – col., 18, line 13), said message receivers adapted to identify to said software dispatcher particular messages for receiving, registered receivers (e.g., a device handler is installed that accepts text pages, looks up the receiver's mobile number and then sends all the relevant information to some standard paging gateway (SMS gateway), a device handler may enable phone calls, col., 17, line 48 – col., 18, line 13),

receivers registering to receive predetermined messages with said dispatcher (e.g., col., 17, line 48 – col., 18, line 13),

the message receivers including one or more software applications (e.g., device handlers and their applications, col., 15, line 13 – col., 15, line 43),

Gudjonsson teaches that the server dispatching the messages can be anywhere on the network (e.g., a device handler is a communication endpoints to which the routing service can dispatch invitations. Device handlers are specifically used to interface with other networks, col., 2, line 52 – col., 3, line 20).

However, Gudjonsson does not specifically mention about the server coupled between a packet network and a private branch exchange.

Draginich teaches telecommunication system (telecom system, figure 2), a private branch exchange (PBX, figure 2), and a server coupled between a packet network and a private branch exchange (e.g., call server and routing controller coupled to the private branch exchange, figure 2), the server adapted to interface the private branch exchange to a packet network (e.g., call server and routing controller coupled to the private branch exchange, figure 2), the server including a software dispatcher (i.e., The call server generates call information from the information from the caller and/or the call arrival data. The routing controller receives agent status data from the agent stations and the call information and selects an agent station from the call information and the agent status data. The routing controller causes the call server to direct the network to route the call to the selected agent station, abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Draginich with the teachings of Gudjonsson in order to

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facilitate dispatching of messages to the registered devices on the network using a PBX exchange because the server would provide message conversion between protocols used by the PBX and the devices on a private network.

Gudjonsson teaches dispatching of messages that use synchronous and asynchronous communication mechanism (e.g., Unified messaging systems allow users to provide essentially one address for a variety of communication options, typically including phone calls, voice mailbox, fax, and e-mails, col., 2, line 52 – col., 3, line 20).

However, Draginich and Gudjonsson do not specifically mention about the synchronous and asynchronous messages sent to the receiver.

Coulouris teaches dispatching messages to the message receivers synchronously and asynchronously (e.g., page 34, line 15 – page 38, line 30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Draginich and Gudjonsson with the teachings of Coulouris in order to facilitate communication for the dispatcher to interact with the registered devices because the dispatcher can send the messages to the registered devices on the network using a synchronous or asynchronous mechanism depending on the type of messages it received.

Draginich, Gudjonsson, Coulouris and Sanders do not specifically mention about dynamically configure and balance system workload.

Sanders teach the concept of dynamically configuration (e.g., lines 36 – 46, col., 2) and balance system workload (e.g., lines 30 – 36, col., 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Draginich, Gudjonsson and Coulouris with the teachings

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of Sanders in order to facilitate dynamically configure and balance system workload because the dynamic configuration would eliminate manual assignment which would enhance the system functionality. Balancing system workload would enhance handling of the messages by the system in a reliable manner.

8. Claims 2-5, 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Draginich, Gudjonsson, Coulouris and Sanders in view of Elliott et. al. 6,335,927 (Hereinafter Elliott).

9. As per claims 2, and 8, Draginich, Gudjonsson, Coulouris and Sanders disclose the claimed limitations rejected under claims 1, 6, 7 and 12-16. However, Draginich, Gudjonsson, Coulouris and Sanders do not specifically mention about the claimed subject matter of claims 2 and 8.

Elliott teaches said software dispatcher is adapted to save asynchronous messages for later transmission in one or more logical message queues (e.g., process to process software interfaces include function or subroutine calls, message queues, shared memory, direct memory access (DMA), and mailboxes, col., 58, line 1 – col., 59, line 40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Draginich, Gudjonsson, Coulouris and Sanders with the teachings of Elliott in order to facilitate usage of the available resources efficiently because the dispatcher can put the asynchronous message in the message queue and the device handler can handle the message whenever it is ready to process it. The efficient usage of resources would enhance the system functionality.

10. As per claims 3 and 9, Draginich, Gudjonsson, Coulouris and Sanders disclose the claimed limitations rejected under claims 1, 6, 7 and 12-16. However, Draginich, Gudjonsson, Coulouris and Sanders do not specifically mention about the claimed subject matter of claims 3 and 9.

Elliott teaches messages are dispatched in order of their priority (e.g., a priority routing technique to favor packets destined for specific network interfaces over packets destined for other network interfaces, col., 58, line 1 – col., 59, line 40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Draginich, Gudjonsson, Coulouris and Sanders with the teachings of Elliott in order to facilitate dispatching messages in the order of their importance because the messages that need to be processed immediately can be delivered to the device handler before the messages that can be processed later. The efficient usage of resources would enhance the system functionality.

11. As per claims 4, 5, 10 and 11, Draginich, Gudjonsson, Coulouris and Sanders disclose the claimed limitations rejected under claims 1, 6, 7 and 12-16. However, Draginich, Gudjonsson, Coulouris and Sanders do not specifically mention about the claimed subject matter of claims 4, 5, 10 and 11.

Elliott teaches dispatching messages comprising dispatching messages as flexible message parameters comprising name, type, and value fields (e.g., Parameters, Name Description Cstring m_name name of the site, type The type of message, as defined in the Data Types, errCode, appendix, col., 275), said value field can comprise another flexible message

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parameter (e.g., `errCode`, The error or warning code as defined in the application's resources, appendix, col., 275).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Draginich, Gudjonsson, Coulouris and Sanders with the teachings of Elliott in order to facilitate the dispatcher to include name, type and a linking parameter in the message structure that is sent to the device handlers because the device handlers would process the message according to the parameter values of the message. The efficient usage of resources would enhance the system functionality.

Conclusion

12. The prior art made of record (forms PTO-892 and applicant provided IDS cited arts) and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (571) 272-3973. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Haresh Patel

May 24, 2005


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SUPERVISORY PATENT EXAMINER
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